California Environmental Protection Agency AIR RESOURCES BOARD	KAWASAKI HEAVY INDUSTRIES, LTD.	EXECUTIVE ORDER M-1-320 New On-Road Motorcycles

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following 2001 model-year engine and emission control systems (ECS) produced by the manufacturer are certified as described below for four-stroke gasoline-powered motorcycles:

Engine Family	Evaporative Family	Displacement (cm^3)	Class	ECS & Special Features
1KAXC1.20AAB	1KAXE17.0A02	1199	III	SFI, PAIR, OC

Vehicle Models (Equivalent Inertia Mass): ZX1200-A2 (380 kg)

Production motorcycles shall be in all material respects the same as those for which certification is granted.

The exhaust emission standards and certification values in grams per kilometer for hydrocarbons (HC) and carbon monoxide (CO), and the HC evaporative (Evap) standard and certification value in grams per test for this engine/evaporative family are as follows. The designated HC standard shall be listed on the permanent tune-up label:

	HC	CO	Evap HC
Standard: (Effective Standard)	1.4	12	2.0 (1.8)
Designated Standard:	2.2	n/a	n/a
Certification:	1.3	5	1.1

BE IT FURTHER RESOLVED: That the designated HC standard shall be the exhaust limit for this engine family and cannot be changed during the model-year. It represents the HC exhaust emission standard applicable to this engine family for determining compliance with Title 13, California Code of Regulations, Sections 1958(b) and 2101.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That because the listed motorcycles are certified to 0.2 grams per test or more below the applicable evaporative emission standard, the vehicles are exempt from complying with the Air Resources Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" pursuant to Executive Order G-70-16-E.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 23rd day of January 2001.

R. B. Summerfield, Chief
Mobile Source Operations Division

Issued: OCT 1 2 2000
Revised:
E.O.#: M-1-320

Motorcycle Engine Family Information Form

1. Manufacturer: KAWASAKI HEAVY INDUSTRIES, LTD.

2. Certification Contact Person, address, phone, and fax:

Jeffrey D. Shetler / David Corey
Kawasaki Motors Corp., U.S.A.
9950 Jeronimo Road, Irvine, CA 92618-2084
Tel : 949-770-0400 Fax : 949-460-5602

3. Model Year: 2001

4. Process Code: New
(new, correction, revision, r/c, f/f. etc.)

5. Engine Family: 1KAXC1.20AAB
50s Engine Code: –
49s Engine Code: –
Calif. Engine Code: ZXT20A-AC1

6. Emission Control System: SFI, PAIR, OC

7. Calif. Designated Standard: 2.2 gm/km

8. Projected Annual Sales: ____

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9. New Technology ___ Yes X No
If yes, cite the correspondence or reference the submittal document: _____

10. Displacement: 1199cm³

11. Number of Cylinders: 4

12. Cylinder Arrangement: Inline-4

13. Cylinder Head Configuration: DOHC

14. Type of Cooling: Liquid

15. Combustion Cycle: 4

16. Method of Aspiration: Natural

17. Fuel System: Fuel Injected

18. Number of Catalytic Converters: 1

19. Adjustable Parameters:

Parameter(s)	Adjustable Range (or NA)	Tamper Resistance Method (or NA)	Method Approved
Air adjust on throttle body (Air/Fuel Ratio)	NA	a tamper proof cap is placed over the adjusting screw	Carry over

20. AECDs In the Emission Control Systems:

Exhaust System		Evaporative System	
AECDs In System:	SFI, PAIR and OC	AECDs In System:	Sealed loop with Canister

Issued: OCT 1 2 2000
Revised:
E.O.#: M-1-320
Engine Family: 1KAXC1.20AAB

Motorcycle Test Information Form

0.35

27. Are you carrying over test results from a previously certified family? X Yes __ No
    a) If yes, indicate family name: YKAXC1.20AAB
    b) Is the family being certified identical to the family from which the data is being carried over? Yes
28. Model Designation of Test Vehicle: ZX1200-A1
29. Test Information Number: 00-1
30. Vehicle ID: JKAZX9A18YA000004
31. Service Accumulation Duration: 15000 (km)
32. Maximum Rated Power: 131 kW @ 9500 RPM
33. Displacement: 1199 cc
34. Certification Fuel: Indolene: 95 ~ 99 RON
35. Test Data Set: Test 1
36. Road Load: 151.7 nt at 65 kph
37. Inertia Mass: 380 kg
38. N/V: 36.69
39. EVAP. Bench Test Method Approved
    Date: 2/23/1983
    Reference: 84ARB-03
40. Unscheduled Maintenance: ___ Yes X No
41. If yes, Vehicle Log provided: _____
42. Exhaust Emission Deterioration Factors:

		Emission Values	
Test Number	System Kilometers	HC	CO
1	3512	1.24	4.5
2	6012	1.61	4.0
3	6042	1.17	5.9
4	12012	1.62	6.0
5	12042	1.37	4.1
6	15012	1.20	4.6
*1	15042	1.20	5.0
*2	15072	1.77	2.7
*3	15102	0.96	6.7
**1	15132	1.23	4.8
**2	15162	1.17	5.0
Interpolated Values at 15000 km:		**HC = 1.4071**	**CO = 4.9096**
Extrapolated Values at 30000 km:		**HC = 1.4887**	**CO = 5.0614**

Check one:	
Regular DF	X
Modified DF	
If different vehicle specify vehicle ID	

*1. This emission test was performed in order to confirm the reproduction of the previous EPA's approved official test result which was submitted in 2000 model year certification.

*2. This emission test was performed using the original ECM modified to reflect A/F at an altitude of 4000 ft.

*3. This emission test was performed using the revised ECM modified to reflect A/F at an altitude of 4000 ft.

**1. This emission test was performed in order to confirm the reproduction of the previous EPA's approved official test result which was submitted in 2000 model year certification.

**2. This emission test was performed using the new Air Suction Valve and ECM.

43. Emission Test Results:

Official Test Results		Test 1	Test 2	Test 3	Test 4		Deterioration Factors
g/km	CO	4.6				(X)	1.031
g/km	CO_2	149.1					----------
g/km	HC	1.24				(X)	1.058
g/test	Evap.	1.060				(+)	0.047

44. Certification Levels:

g/km	CO	5			
g/km	HC	1.3			
g/test	Evap.	1.107			

Application Processes by: Joseph Tegede Date: 1/22/01
Application Reviewed by: [signature] Date: 1/22/01